

Notice of Allowability

Application No.

09/901,917

Applicant(s)

WALKER ET AL.

Examiner

Art Unit

Toniae M. Thomas

2822

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment filed on 06 May 2004.
2. ☒ The allowed claim(s) is/are 1-23.
3. ☒ The drawings filed on 09 July 2001 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

EXAMINER'S AMENDMENT

Amendment

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

In Specification

Paragraph [01] has been replaced with the following paragraph:

--This application is a continuation of U.S. Patent Application Serial No. 09/249,388, filed on February 12, 1999, now Patent No. US 6,258,660 B1, which is a divisional of U.S. Patent Application Serial No. 8/940,307, filed on September 30, 1997, now US 6,476,435, both of which are incorporated herein by reference. --

Reasons for Allowance

2. The following is an examiner's statement of reasons for allowance: the prior art of record does not anticipate, teach or suggest a process of forming a container cell substantially as claimed. For example, the Lee et al. patent (Lee - US 5,343,354) discloses a process of forming a container cell, wherein the process comprises the steps of: etching a container cell into an isolation film within a trench, the container cell being situated substantially between a first

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gate stack and a second gate stack and having an edge defined by a semiconductor substrate and the isolation film, the edge of the container cell substantially extending to and terminating at each of the first and second gate stacks; forming a storage node within the container cell; forming a cell dielectric over the storage node; and forming a cell plate over the cell dielectric. However, the prior art of record does not anticipate, teach or suggest, either separately or combined, a process of forming a container cell substantially as claimed, wherein the process comprises: etching a container cell into an isolation film within a trench, the container cell being situated substantially between a first gate stack and a second gate stack and having an edge defined by a semiconductor substrate and the isolation film, the edge of the container cell substantially extending to and terminating at each of the first and second gate stacks; forming a storage node within the container cell; forming a cell dielectric over the storage node; forming a cell plate over the cell dielectric, *and forming an insulation layer over the cell plate and within the container cell.*

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Toniae M. Thomas whose telephone number is (571) 272-1846. The examiner can normally be reached on Monday-Thursday from 8:30 a.m. to 5:30 p.m..

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amir Zarabian can be reached on (571) 272-1852. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JMJ

25 June 2004

A handwritten signature in black ink, appearing to read 'Mary Wilczewski', with a stylized flourish at the end.

Mary Wilczewski
Primary Examiner